

**Amendments to the Specification**

Please replace paragraph [0006] at page 2 of the specification with the following new paragraph [0006]:

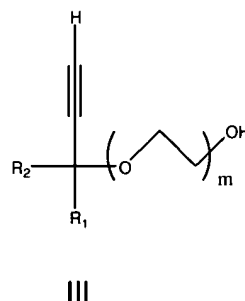
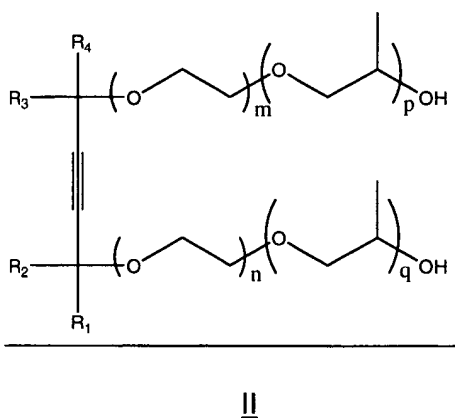
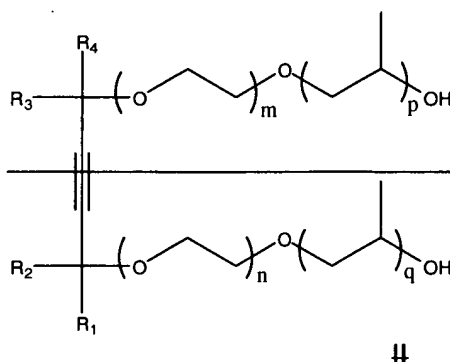
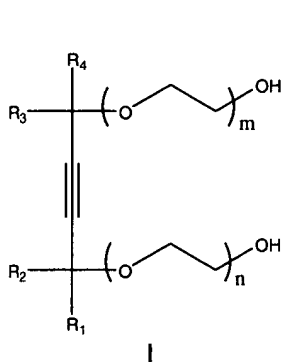
**[0006]** Immersion fluids comprising at least one carrier medium, and immersion fluids comprising at least one carrier medium and at least one additive, ~~and the additives used therein~~ are disclosed herein. In one aspect of the present invention, there is provided an immersion fluid comprising: from about 10 ppm to the maximum solubility limit of at least one additive selected from an alkyl alcohol or a polymeric alcohol having one or more hydroxyl groups; an alkyl ethoxylate or a propylene oxide (PO) derivative thereof; an alkyl carboxylate or an alkyl acid ester; an alkyl amine having one or more amine groups including primary, secondary and tertiary amines or an alkyl amine ethoxylate; an acetylenic alcohol, an acetylenic diol or ethylene oxide/propylene oxide derivatives thereof; an alkyl polyglycoside; a block oligomer or a polymer of ethylene and propylene oxide; an alkyl sulfate, an alkyl ethoxylate sulfate, an alkyl sulfonate, or an alkyl ethoxylate sulfonate; an alkyl ammonium salt; a glycidal ether or a glucamine derivative with an alkyl amine, an alkyl diamine, an alkyl alcohol, or an acetylenic alcohol; an alkyl urea or a dialkyl urea; a polysiloxane, a poly(dimethyl)siloxane, a polysiloxane polyester copolymer or derivatives thereof; a fluorinated or partially fluorinated acetylenic alcohol, diol or derivatives thereof; a fluorosurfactant; a salt; and an electrolyte; wherein the salt and the electrolyte have a specific absorbance  $<1 \text{ cm}^{-1}$  at an operating wavelength ranging from 140 nm to 248 nm and a refractive index equal to or greater than water at the operating wavelength, provided that if the at least one additive is a fluorosurfactant then the immersion fluid comprises about 1 % by weight or greater of an aqueous fluid.

Please replace paragraph [0007] at page 3 of the specification with the following new paragraph [0007]:

**[0007]** In another aspect of the invention, there is provided an immersion fluid having a transmission of 80% or greater at an operating wavelength ranging from 140 nm to 248 nm comprising: at least one carrier medium selected from the group consisting of an aqueous fluid, a non-aqueous fluid, and mixtures thereof wherein the at least one carrier medium has a refractive index greater than or equal to water at the operating wavelength; and from about 10 ppm to the maximum solubility limit of at least one additive selected from an alkyl alcohol or a polymeric alcohol having one or more hydroxyl groups; an alkyl ethoxylate or a propylene oxide (PO) derivative thereof; an alkyl carboxylate or an alkyl acid ester; an alkyl amine having one or more amine groups including primary, secondary and tertiary amines or an alkyl amine ethoxylate; an acetylenic alcohol, an acetylenic diol or ethylene oxide/propylene oxide derivatives thereof; an alkyl polyglycoside; a block oligomer or a polymer of ethylene and propylene oxide; an alkyl sulfate, an alkyl ethoxylate sulfate, an alkyl sulfonate, or an alkyl ethoxylate sulfonate; an alkyl ammonium salt; a glycidal ether or a glucamine derivative with an alkyl amine, an alkyl diamine, an alkyl alcohol, or an acetylenic alcohol; an alkyl urea or a dialkyl urea; a polysiloxane, a poly(dimethyl)siloxane, a polysiloxane polyester copolymer, or derivatives thereof; a fluorinated or partially fluorinated acetylenic alcohol, diol or derivatives thereof; a fluorosurfactant; a salt; and an electrolyte; wherein the salt and the electrolyte have a specific absorbance  $<1 \text{ cm}^{-1}$  at an operating wavelength ranging from 140 nm to 248 nm and a refractive index equal to or greater than water at the operating wavelength, provided that if the at least one additive is a fluorosurfactant then the immersion fluid comprises about 1 % by weight or greater of an aqueous fluid.

Please replace paragraph [0019] at page 8 of the specification with the following new paragraph [0019]:

**[0019]** In certain embodiments of the present invention, the immersion fluid may contain at least one additive that is an acetylenic alcohol, an acetylenic diol, or an ethylene oxide/propylene oxide derivative thereof. Exemplary acetylenic alcohol, acetylenic diol or ethylene oxide/propylene oxide derivatives that can be used as the at least one additive within an immersion fluid may be represented by the following formulas I through III:



wherein  $R_1$  and  $R_4$  are each independently a straight or a branched alkyl chain having from 3 to 10 carbon atoms;  $R_2$  and  $R_3$  are each independently a hydrogen atom or an alkyl chain having from 1 to 5 carbon atoms; and  $m$ ,  $n$ ,  $p$ , and  $q$  are each independently a number that

ranges from 0 to 20. The at least one additive having the formula I, II or III are commercially available from Air Products and Chemicals, Inc. of Allentown, PA, the assignee of the present invention, under the trade names SURFYNOL® and DYNOL®. In certain embodiments, the acetylenic diol portion of the molecule of formulas I or II is 2,4,5,9-tetramethyl-5-decyne-4,7-diol or 2,5,8,11-tetramethyl-6-dodecyne-5,8-diol. The at least one additives having the formulas I through III may be prepared in a number of ways including the methods described, for example, in U. S. Pat. No. 6,313,182 and EP 1115035A1, which are assigned to the assignee of the present invention and incorporated herein by reference in their entirety.

Please replace paragraph [0033] at page 16 of the specification with the following new paragraph [0033]:

**[0033]** A typical immersion lithography process uses an apparatus that has a servo motor driven wafer stage that supports and positions a resist-coated substrate or wafer underneath an optic device such as a lens. The optic device may also be a prism, a mirror or combinations thereof. The immersion fluid is dispensed onto at least a portion of resist-coated substrate through one or more nozzles to form a puddle. A radiation source that emits light at the operating wavelength then passes through a lens and the puddle of immersion fluid prior to exposure to at least a portion of the resist-coated substrate.